

Datasheet: VMA00173

Description:	MOUSE ANTI TUBULIN ALPHA 1A CHAIN
Specificity:	TUBULIN ALPHA 1A CHAIN
Format:	Purified
Product Type:	PrecisionAb™ Monoclonal
Clone:	OT12C8
Isotype:	IgG2b
Quantity:	100 µl

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	■			1/1000

PrecisionAb antibodies have been extensively [validated for the western blot application](#). The antibody has been validated at the suggested dilution. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependant on sample type.

Target Species	Human
Species Cross Reactivity	Reacts with: Mouse, Rat N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Preparation	Mouse monoclonal antibody purified by affinity chromatography from ascites.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin 50% Glycerol
Immunogen	Full length recombinant human tubulin alpha 1A chain (NP_006000) produced in HEK293T cells
External Database Links	UniProt: Q71U36 Related reagents Entrez Gene: 7846 TUBA1A Related reagents

Synonyms

TUBA3

Specificity

Mouse anti Human tubulin alpha 1A chain antibody recognizes the tubulin alpha 1A chain, also known as hum-a-tub1, hum-a-tub2, tubulin B-alpha-1, tubulin alpha-1A chain, tubulin alpha-3 chain and tubulin, alpha, brain-specific.

Microtubules of the eukaryotic cytoskeleton perform essential and diverse functions and are composed of a heterodimer of alpha and beta tubulins. The genes encoding these microtubule constituents belong to the tubulin superfamily, which is composed of six distinct families. Genes from the alpha, beta and gamma tubulin families are found in all eukaryotes. The alpha and beta tubulins represent the major components of microtubules, while gamma tubulin plays a critical role in the nucleation of microtubule assembly. There are multiple alpha and beta tubulin genes, which are highly conserved among species. The TUBA1A gene encodes alpha tubulin and is highly similar to the mouse and rat Tuba1 genes. Northern blotting studies have shown that the gene expression is predominantly found in morphologically differentiated neurologic cells. TUBA1A is one of three alpha-tubulin genes in a cluster on chromosome 12q. Mutations in TUBA1A cause lissencephaly type 3 (LIS3) - a neurological condition characterized by microcephaly, mental retardation, and early-onset epilepsy and caused by defective neuronal migration. Alternative splicing results in multiple transcript variants encoding distinct isoforms (provided by RefSeq, Jul 2012).

Mouse anti Human tubulin alpha 1A chain antibody detects a band of 50 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

Western Blotting

Anti tubulin alpha 1A chain detects a band of approximately 50 kDa in HEK293 cell lysates.

Instructions For Use

Please refer to the [PrecisionAb western blotting protocol](#). For additional information on secondary antibody dilution and exposure time see product web page.

Storage

Store undiluted at -20°C, avoiding repeated freeze thaw cycles.

Shelf Life

As supplied, 12 months from date of despatch.

Acknowledgements

PrecisionAb™ is a trademark of Bio-Rad Laboratories.

Health And Safety Information

Material Safety Datasheet documentation #10048 available at:
Antibody (10048): <https://www.bio-rad-antibodies.com/uploads/MSDS/10048.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

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